



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,711	12/11/2001	Michael Jeffrey Agnes	0275L-000527	4110

7590 09/20/2002

Christopher M. Brock and Scott T. Gray  
Harness, Dickey & Pierce, P.L.C.  
Suite 400  
5445 Corporate Drive  
Troy, MI 48098-2683

EXAMINER

MOHANDESI, IRAJ A

ART UNIT	PAPER NUMBER
----------	--------------

2834

DATE MAILED: 09/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/014,711

Applicant(s)

AGNES ET AL.

Examiner

Iraj A Mohandesi

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,7-13 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,7-13 and 16-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 01/01/2002 was filed after the mailing date of the 04/16/2002 on 04/16/2002. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 "a double insulated rotor and stator" is indefinite, since the limitation can be Interpreted

A; 'a rotor with two insulation layers and a stator with two insulation layers.

B: 'a rotor with one insulation layer, and a stator with two insulation layers.

C; a rotor with two insulation layers, and a stator with one insulation layer.

D. a rotor with one insulation layer, and a stator with one insulation layer.

Therefore A, C, D contradict the specification, Fig. 7 and applicant argument

(remarks, page 5, line 8-21).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 1, 3, 7-11, 16-19**, are rejected under 35 U.S.C. 103(a) as being unpatentable over;

**Gschwender ( US patent 5,073,736)** in view of **Van Dine US Patent 6,072,252**.

**Gschwender'736** discloses a brushless motor comprising a housing (1), a bearing end cap (7, Fig. 1 column 2, line 33), a rotor assembly (17, Fig. 1 column 3, line 44), a shaft (9, Fig. 1, column 2 line 36), a stator stack comprising inherently plurality of slots (26, Fig. 1, column 3, line 44), a plurality of winding wound in said stator slots (column 3, line 45-47), inherently a nonconductive insulating material around the winding (as mentioned in column 2, line 5-20, the Insulation class I, II, III VDE, DIN "German Industrial standard" requires a well insulated current carrying winding against the laminated stator slots), the motor housing is constructed of a non conductive material (1, Fig. 1 column 4, line 65)

However **Gschwender'736** fails to teach a brushless motor having a nonconductive electrically insulating tube disposed between the shaft and the rotor.

**Van Dine'252** discloses a rotor having a nonconductive electrically insulating tube (7) disposed on the shaft (1) and the rotor (7, 43 Fig. 2, 4, 9 column 2, line 17) for the purpose

of insulating the motor shaft.

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine **Gschwender'736** brushless motor with a rotor having a nonconductive electrically insulating tube disposed between the shaft and the rotor as taught by **Van Dine'252** for the purpose of insulating the motor shaft.

The combined motor of **Gschwender'736**, **Van Dine'252** fail to teach a stator having a plurality of first strips and second strips of insulating material inserted in to the stator slots.

5. **Claims 4,12,13,20** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gschwender'736**, **Van Dine'252** as applied to claims 1,3,7-11,16-19 above, and further in view of **Prindle US patent 2,173,726**.

**Prindle'726** discloses a stator having a plurality of first strips and second strips of insulating material inserted in to the stator slots to insulate the winding against the laminated stator slots.

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify **Gschwender'736**, **Van Dine'252** motor with a stator having a plurality of first strips and second strips of insulating material inserted in to the stator slots for the purpose of insulating the winding against the laminated stator slots.

### ***Response to Arguments***

Applicant's arguments filed 07/16/2002 have been fully considered but they are not persuasive. The combination of **Gschwender'736, Van Dine'252 and Prindle'726** teach all limitation of the claimed invention.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

### ***Communication***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Iraj A Mohandesi whose telephone number is (703)305-3242. The examiner can normally be reached on M-F.

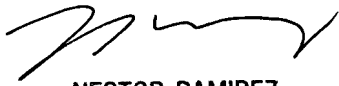
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9314 for regular communications and (703)872-9314 for After Final communications.

Application/Control Number: 10/014,711  
Art Unit: 2834

Page 6

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-0377.

IM  
September 17, 2002



NESTOR RAMIREZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800